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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,042	10/03/2001	Unni Olsbye	2001-0768A	2508

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EXAMINER

ILDEBRANDO, CHRISTINA A

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 08/07/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/869,042

Applicant(s)

OLSBYE ET AL.

Examiner

Christina Ildebrando

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 44-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 and 44-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

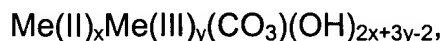
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-20, 26-29, 32, 36_{29 or 32}, and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Derouane et al.

Derouane et al. (US 5,245,096) discloses a catalyst composition useful in the preparation of aromatic compounds. The catalyst comprises a Group VIII metal loaded on a hydrotalcite derived support material having the general formula:



wherein Me(II) is at least one divalent metal selected from the group consisting of copper, magnesium, manganese, zinc, and group VIII metals and Me(III) is at least one trivalent metal selected from the group consisting of aluminum, chromium, and iron (column 1, lines 45-55). Suitable Group VIII metals include platinum (column 3, lines 30-35). The composition may be composited with a binder (column 3, lines 60-69).

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The disclosed product of Derouane et al. and the instantly claimed product appear to be essentially the same and are comprised of the same components. In the event any differences can be shown for the product of the product-by-process claims as opposed to the product taught by the prior art, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). Also, when the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to applicant to establish that their product is patentably distinct and not the examiner to show the same process of making. *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

4. Claims 1-20, 26-29, 32, 36_{29 or 32}, and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Van Broekhoven.

Van Broekhoven (US 4,866,019) discloses a catalyst composition useful in hydrocarbon conversion processes. The catalyst composition comprises an anionic clay having a hydrotalcite structure, corresponding to the general formula:



Suitable divalent cations include magnesium, suitable trivalent cations include aluminum and/or gallium, and suitable anions include OH or CO₃ (column 3, lines 20-45). The composition may be combined with an oxidation promoter such as platinum (column 4, lines 1-10). The composition may be composited with a binder (column 5, lines 40-46).

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The disclosed product of Van Broekhoven and the instantly claimed product appear to be essentially the same and are comprised of the same components. In the event any differences can be shown for the product of the product-by-process claims as opposed to the product taught by the prior art, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). Also, when the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to applicant to establish that their product is patentably distinct and not the examiner to show the same process of making. *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

5. Claims 1-5, 7-20, 26-37, and 44-49 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 94/29021.

WO 94/29021 teaches a catalyst composition useful in the dehydrogenation of paraffinic hydrocarbons, such as propane. The catalyst composition comprises a hydrotalcite having a composition $\text{Mg}_6\text{Al}_2(\text{OH})_{16}\text{CO}_3\cdot 4\text{H}_2\text{O}$ in its uncalcined state, which further contains a metal of group VIII such as platinum, a metal of group IV such as tin, and optionally, a group I metal such as cesium (page 2, lines 20-40 and page 3, lines 25-30).

The disclosed product of the WO reference and the instantly claimed product appear to be essentially the same and are comprised of the same components. In the event any differences can be shown for the product of the product-by-process claims as

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opposed to the product taught by the prior art, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). Also, when the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to applicant to establish that their product is patentably distinct and not the examiner to show the same process of making. *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

Response to Arguments

6. Applicant's arguments filed June 20, 2003 have been fully considered but they are not persuasive.

With regards to the rejection over Derouane et al., Van Broekhoven et al., and WO 94/29021, applicant argues that the catalytic material instantly claimed is more stable if the loading of the metals is performed directly on the hydrotalcite material or in such a way that Mg(Al)O is transformed at least partly back to the hydrotalcite phase and further argues that the applied references do not disclose the back transformation instantly claimed or the stability of the claimed catalysts. These arguments have been considered but are not persuasive. First, it does not appear that applicants arguments are commensurate in scope with what have been claimed. It is not clear that the language of the claims requires impregnation of an uncalcined hydrotalcite material or that the language of the claims includes such a back transformation. Also, applicants arguments and examples appear to be directed towards an Mg-Al hydrotalcite

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composition impregnated with platinum and tin, while the instant claims encompass a larger group of compounds.

Applicant appears to be arguing that the cited references do not teach the instant product by process limitations. As discussed above, the product by process limitations have been noted. However, it has been held that even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. See *In re Thorpe*, 227 USPQ 964.

Once the examiner provides a rationale tending to show that the claimed product appears to be the same or only slightly different from that of the prior art, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the product of the prior art. Applicant has not met this burden. There has been no showing that the product instantly claimed differs structurally or in any way, by virtue of its process of making, from the product taught by the prior art. For example, applicant has not conducted any side by side comparisons with the prior art catalysts, which are commensurate in scope with what has been claimed and which would demonstrate that the claimed compositions do in fact possess a property or characteristic by virtue of its process of making, such as higher stability, as argued herein. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 145 USPQ 716, 718.

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Specifically with regards to the Van Broekhoven reference, applicant argues that the carrier of the reference is not limited only to hydrotalcite and it is not clear that a significant portion of the metal is impregnated on the hydrotalcite. This argument has been considered but is not persuasive. The claims do not require that the carrier consist only of hydrotalcite or that a significant portion of the platinum be impregnated on the hydrotalcite. At least a portion of the metal would be present on the hydrotalcite carrier taught by Van Broekhoven reference and is therefore considered to meet the claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Ildebrando whose telephone number is (703) 305-0469. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703) 308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

CAI
August 5, 2003



M. ALEXANDRA ELVE
PRIMARY EXAMINER